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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 09/913,745   | 12/10/2001  | Kathleen R. McKeown  | A32313-PCT                    | 3754             |
| 21003 7590 02/26/2007<br>BAKER & BOTTS L.L.P.<br>30 ROCKEFELLER PLAZA<br>44TH FLOOR<br>NEW YORK, NY 10112-4498 |             |                      | EXAMINER<br>CORRIELUS, JEAN M |                  |
|  |             |                      | ART UNIT<br>2162              | PAPER NUMBER     |
| SHORTENED STATUTORY PERIOD OF RESPONSE   |             | MAIL DATE            | DELIVERY MODE                 |                  |
| 3 MONTHS   |             | 02/26/2007           | PAPER                         |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

09/913,745

Applicant(s)

MCKEOWN ET AL.

Examiner

Jean M. Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7/31/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/14/06</u>   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to amendment filed on June 22, 2006, in which claims 1-22 are presented for further examination.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) filed on August 14, 2006 complies with the provisions of M.P.E.P 609. It has been placed in the application file. The information referred to therein has been considered as to the merits.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 31, 2006 has been entered.

#### ***Remark***

3. Applicant asserted that Nakao and Razin does not disclose the recited "sentence generation is performed using the phrase in the phrase intersection table which have been subject to said temporal processing". After further review the invention as claimed in light of the cited references (Nakao and Razin), the examiner strongly agrees that cited claimed feature "sentence generation is performed using the phrase in the phrase intersection table which have been subject to said temporal processing" is taught by the

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Nakao and Razin. More specifically, Nakao discloses a document summarization system having a summary unit for generation summary from a plurality of documents, wherein the summary is generated based on both user-focused information and author-focused information. The phrase intersection as disclosed by Nakao is the similarity and the differences among the document, where Nakao uses the morphological analyzing to process the similarity and differences among the document (col.14, lines 48-67). Razin, however, discloses a system for standardizing phrases in the document by identifying the phrases that are similar in order to match phrasing throughout the document (col.2, lines 60-64). The combination of Nakao and Razin disclosed substantially the invention as claimed.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 5-8, 12-16 and 20-22 as best understood by examiner are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao US Patent no. 6,205,456 and Razin et al., (hereinafter "Razin") US Patent no. 6,098,034.

As to claim 1, Razin discloses the claimed "extracting phrases having focus elements from the plurality of documents" as extracting phrases in a document to automatically create a list of extracted phrases (col.2, lines 45-56; col.30, lines 53-54); "performing phrase intersection analysis on the extracted phrases to generate a phrase intersection

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table” determining which phrases that are identical (col.2, lines 56-64); “performing temporal processing on the phrases in the phrase intersection table” (col.3, lines 24-30, lines 46-58; col.4, lines 4-17 ); and “performing sentence generation using the phrases in the phrase intersection table” constructing sentence from the determination of standard phrases (col.3, lines 35-38). However, Razin does not explicitly disclose the use of generating a summary of the plurality of related documents. On the other hand, Nakao discloses a system for generating a summary of the plurality of related documents available in computer readable media by performing sentence generation using the phrases in the phrase intersection table (col.5, lines 64-67; col.6, lines 14-17); and “extracting phrases having focus elements from the plurality of documents” extracting a phrase in the document based on the condition of the pattern or the extracting sentences (col. Lines 57-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the cited references, wherein the master phrase finding phrase, provided therein (see Razin’s fig. 2) would incorporate the use of generating a summary of the plurality of related documents. One having ordinary skill in the art at would found it motivated to utilize such a combination in order to ensure the syntactic coherence of the document.

6. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Nakao US Patent no.6,205,456 and McGreevy; Michael US Patent no. 6,823,333

As to claim 1, discloses the claimed “extracting phrases having focus elements from the plurality of documents” (extracting a portion (phrase) related to the author focused information from a plurality of documents to be summarized; col.8, lines 22-24; col.10,

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lines 40-56); “performing phrase intersection analysis on the extracted phrases to generate a phrase intersection table” (determination conditions of document elements from which the author focused information is extracted by comparing with the document structure information; col.10, lines 62-65; col.12, lines 57-61 to generate a focused information list, focused concept list); and “generating a summary of the plurality of related documents available in computer readable media by performing sentence generation” (generating a summary of the plurality of documents; col.12, lines 36-65). However, does not explicitly perform a sentence generation and temporal processing using phrases in the phrase intersection table. However, McGreevy; Michael performs “a sentence generation and a temporal processing using phrases in the phrase intersection table” as a paraphrasing rules that detect similarities in non-identical phrases in the documents; and a intersection model (col.20, lines 13-25; 35-41); relationship among the phrases. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teaching of the cited references, wherein the document summarization of Nakao would incorporate the use of paragraphing rules as discloses by McGreevy; Michael for the purpose of automatically generating a summary appropriate to the documents and providing a more concise description of the documents summary, thereby increasing the efficiency of the document summarization system of Nakao.

As to claim 2, McGreevy, Michael discloses substantially the invention as claimed. In addition, applying paraphrasing rules to non-identical root nodes to determine if non-identical node is equivalent (col.20, lines 13-25; 35-41).

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As to claim 3, Nakao discloses “a tree structure” a class definition, a dependence-defined document structure information (see fig.4, col.1, lines 35-42).

As to claim 4, Nakao discloses a change in grammatical features, omission of an empty head, transformation of one part of speech to another, and semantically related word “ (col.14, lines 55-58; col.15, lines 4-13).

As to claims 5-7, Nakao substitutes data certain references for ambiguous temporal references; a language generation engine and operating the language engine” using the natural language to substitute ambiguous reference (col.15, lines 53-64).

As to claims 8-15:

Claims 8-15 are system claims for performing the method of claims 1-7 above. In addition, Nakao discloses “a storage for storing document in the collection” (col.9, lines 53-56); “a lexical database” (col.19, lines 40-51); “a processing subsystem, the processing subsystem being operatively coupled to the storage device and the lexical database, the processing subsystem being programmed to access the plurality of related documents in the storage device and generate a summary” (col.19, lines 40-51).

As to claims 16-22

Claims 16-22 are computer readable media comprises instructions for executing the method of claims 1-7 above.


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***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jean M Corrielus  
Primary Examiner  
Art Unit 2162

February 20, 2007